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10/040,506	12/27/2001	David M. Hall	10013144	2614

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HEWLETT-PACKARD COMPANY
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EXAMINER

PHAM, THIERRY L

ART UNIT PAPER NUMBER

2624

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,506

Applicant(s)

HALL ET AL.

Examiner

Thierry L. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-20,22-29,31-33 and 35-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-20,22-29,31-33 and 35-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 12/28/05.
- Claims 15-20, 22-29, 31-33, 35-50 are pending; wherein claims 35-50 are newly added; claims 1-14, 21, 30, and 34 have been canceled.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15, 27-29, 39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner is unable to locate portion of the original filed specification that teaches "detecting the establishment of a communication link between a computing device and the printing device where establishment of the link includes transmission of computer device parameters to the printing device" as cited in claims 15, 27-29, and 39. The examiner can only locate on page 6, lines 4-15 that teaches transmitting computer device parameters to printer device, but unable to find any further teachings of "detecting the establishment of a communication link between a computing device and the printing device where establishment of the link includes transmission of computer device parameters to the printing device".

Claim 31 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner unable to locate any portion of the original filed

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specification that teaches “to allow the computing device to select and download files from the file system” as cited in claim 31. According to the original filed specification, the printer device determines the compatibility between computing device and print software stored and to select appropriate software to download to computing device; in other words, print software selection is performed by the printer device and not by the computing device. As for prior art rejection, the examiner herein interprets the selection is herein performed by the printer device.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15, 27-29, 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Newly added features/limitations “where establishment of the link includes transmission of computer device parameters to the printing device” are unclear to the examiner. The examiner is unclear whether “computer device parameters” as cited are parameters that are used to establish communication link between printer and computer device or parameters that are used to determine an appropriate/compatible print software for computing device. According to the original filed specification, “computer device parameters” such as product identifier, operating system identifier, etc. are sent from computing device to printer in order to determine and to select a compatible print software to be send to computer device (see page 6, lines 5-15). As clearly stated on page 6, lines 5-15, “computer device parameters” are transmitted *after* the communication between printer and computing device have been established. For prior art rejection purpose, the examiner herein interprets “computer device parameters” are used to determine an appropriate/compatible software for computing device.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15, 17-20, 22-25, 27-29, 31-33, 35-42, 44-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakagiri (US 6606669).

Regarding claim 15, Nakagiri discloses a method for use in enabling printing on a printing device, the method comprising:

- detecting the establishment of a communication link (communication link via cable 21, fig. 1) between a computing device (host computer 3000, fig. 1) and the printing device (printer 1500, fig. 1) wherein establishment (col. 6, lines 43-48) of the link includes transmission of computing device parameters (transmitting operating system identifier of host computer 3000 to printer 1500, fig. 4, col. 5, lines 15-45 and col. 8, lines 40-45) to the printing device; and
- in response to the establishment to the communication link, downloading print software stored in memory of the printing device to the computing device (downloading printer driver stored on printer 1500 to host device 3000, fig. 3, col. 6, lines 20-34), the print software being useful (col. 4, lines 40-48 and col. 6, lines 50-56) in the computing device printing documents on the printing device (printer 1500, fig. 1, col. 4, lines 40-48).

Regarding claim 17, Nakagiri further discloses the method of claim 15, wherein downloading print software includes sending the print software via a hardware link (interface 21, fig. 1).

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Regarding claim 18, Nakagirl further discloses the method of claim 15, further comprising sending a print job (col. 8, lines 8-30) from the computing device to the printing device.

Regarding claim 20, Nakafirl further discloses the method of claim 18, wherein sending the print job includes sending the print job via a hardware link (interface 21, fig. 1).

Regarding claim 22, Nakagirl further discloses the method of claim 15, further comprising, identifying print software that is compatible (identifying compatibility prior to transfer printer driver from printer to host pc, fig. 4) with the computing device based on computing device parameters (based upon OS identifier, fig. 4, col. 8, lines 45-52).

Regarding claim 23, Nakagirl further discloses the method of claim 22, further comprising, selecting (S44, fig. 4) the compatible print software on the printing device for downloading to the computing device.

Regarding claim 25, Nakagirl further discloses the method of claim 15, further comprising signaling the printing device and establishing the communication link (interface 21, figs. 1-2) in response to signaling the printing device.

Regarding claim 27, Nakagirl further discloses a program storage medium (ROM, fig. 2) readable by a computing device, the program storage medium tangibly embodying a program of instructions executable by the computing device to perform a method for use in enabling a computing device to print on a printing device, the method comprising:

- detecting establishment of a communication link (communication link via interface 21, fig. 1) between the computing device and the printing device including transmission of computing device parameters to the printing device (transmitting operating system identifier of host computer 3000 to printer 1500, fig. 4, col. 8, lines 40-45); and

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- in response to the establishment of the communication link, downloading print software stored in the memory of the printing device to the computing device (fig. 3), the print software being useful in the computing device to print documents on the printing device.

Regarding claim 28, Nakagiri further discloses a printing device (printer 1500, fig. 1) comprising:

- memory having (ROM 13, fig. 1-2) a print driver configured to enable printing on the printing device; and a communication link selectively established between the printing device and a computing device to enable download (fig. 3) of the print driver from the printing device to the computing device in response to receipt of a signal;
- where the establishment of the communication link includes transmission of computing device parameters (transmitting operating system identifier of host computer 3000 to printer 1500, fig. 4, col. 8, lines 40-45) to the printing device.

Regarding claim 29, Nakagiri further discloses a printing method comprising:

- receiving a signal to establish a communication link (communication link via interface 21, fig. 1) between a printing device and a computing device;
- establishing the communication link (fig. 4) with the computing device including transmission of computing device parameters to the printing device (transmitting operating system identifier of host computer 3000 to printer 1500, fig. 4, col. 8, lines 40-45);
- upon establishing the communication link, downloading a printer driver stored in memory (fig. 3) of the printing device to the computing device via the communication link, the printer driver being useful (col. 4, lines 40-48 and col. 6, lines 50-56) in the computing device printing on the printing device;
- receiving a print job (col. 4, lines 40-50) from the computing device; and
- printing the print job on the printing device (printer 1500, fig. 1).

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Regarding claim 31, Nakagiri further discloses a printing device (printer 1500, fig. 1), comprising:

- a file system (file system stored in data ROM 13, fig. 2);
- print software (i.e. OS 13A, OS 13B, fig. 3) stored in the file system; and
- means for connecting (bidirectional interface cable 21, fig. 2) the printing device to a computing device as to allow the computing device to select (selects and downloads file from printer 1500 to host computer 3000, fig. 4, col. 6, lines 6-65 and col. 8, lines 52-65) and download files (downloads files from ROM 13, fig. 2) from the file system;
- wherein the print software includes a start-up program (control program stored within ROM 13, col. 3, lines 58-65), transferred to the computing device (transfers from printer 1500 to host computer 3000, fig. 4) on connecting, usable for initiating downloading files (control programs for controlling transmissions between printer and host device, col. 3, lines 60-65, figs. 3-4) from the printing device file system.

Regarding claim 32, Nakagiri further discloses the printing device of claim 31, wherein the files correspond to characteristics (OS identifier, fig. 4, cols. 5-6) of the computing device.

Regarding claims 33, 35-38, and 40, Nakagiri further discloses the printing device, wherein the characteristics of the computing device are selected from a group consisting of an operating system identifier (OS identifier, fig. 4, col. 8, lines 45-50 and col. 9, lines 25-28), an application program identifier (i.e. driver ID OS 13A, fig. 3-4), and a computing device identifier (col. 9, lines 10-12).

Regarding claim 39, Nakagiri further discloses a printing system (fig. 1) comprising:

- a computer (host 3000, fig. 1);
- a printing device (printer 1500, fig. 1) including memory (ROM 13, fig. 2) holding print software (i.e. printer drivers, fig. 2) configured to enable the computing device (col. 4, lines 40-48 and col. 6, lines 45-65) to print documents to the printing device;

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- wherein upon establishment of a communication link (bidirectional communication link 21, fig. 1) between the printing and computer, including transmission of computer parameters (OS identifier, fig. 4, col. 8, lines 45-50 and col. 9, lines 25-28) to the printing device, the printing device downloads (downloading, fig. 4) the print software to the computer.

Regarding claim 41, Nakagiri further discloses the system of claim 39, wherein the print software includes a print driver (fig. 4).

Regarding claim 42, Nakagiri further discloses the system of claim 39, wherein the print software includes a print application (printer driver, fig. 4) configured to send a print job from the computing device to the printing device.

Regarding claim 44, Nakagiri further discloses the system of claim 39, wherein the communication link is a hardware link (interface 21, fig. 1).

Regarding claim 45, Nakagiri further discloses the system of claim 39, wherein the printing device includes a file system (ROM 13, fig. 2) accessible by the computer device.

Regarding claim 46, Nakagiri further discloses the system of claim 45, wherein the file system includes a start-up program configured to automatically transfer (automatically downloading/transferring, col. 2, lines 15-22, col. 7, lines 5-10, and col. 8, lines 8-30) to the computer upon recognition of the file system (col. 8, lines 8-30) by the computer and execute, downloading additional print software to the computer.

Regarding claim 47, Nakagiri further discloses the system of claim 39, wherein the printing device is configured to identify print software that is compatible

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(automatically downloading/transferring, col. 2, lines 15-22, col. 7, lines 5-10, and col. 8, lines 8-30) with the computing device.

Regarding claim 48, Nakagiri further discloses the system of claim 47, wherein the printing device is configured to select (automatically downloading/transferring, col. 2, lines 15-22, col. 7, lines 5-10, and col. 8, lines 8-30) the compatible print software for downloading to the computing device.

Regarding claim 49, Nakagiri further discloses the system of claim 39, wherein the communication link is established (col. 6, lines 42-48) in response to a signal from the computing device to the printing device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 19, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagiri (US 6606669), and in view of Itoh et al (US 5490287).

Regarding claims 16, 19, and 43, Nakagiri teaches a printing system (fig. 1) comprising a host computer 3000 and printer 1500 connected via a wired interface 21 (fig. 1, other communication methods can be used such as serial, parallel, and etc), but does not explicitly suggesting a communication link (interface 21, fig. 1) is a wireless communication link.

Itoh, in the same field of endeavor for printing, teaches a printing system using a wireless communication link for communicating between host computer and printer (figs. 6-7, col. 5, lines 10-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made by modifying printing system of Nakagiri to include a wireless

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communication link (e.g. wireless communication is well known in the art) as taught by Itoh because of a following reason: (●) the wireless device as taught by Itoh requires less total power and contributes to network security (col. 1, lines 49-55); (●) wireless communication provides better portability, for example, network printer can be placed in various different locations without having to incur additional costs (i.e. hardware costs) as comparing to traditional wired interface link.

Therefore, it would have been obvious to combine Nakagiri with Itoh to obtain the invention as specified in claims 16, 19, and 43.

Regarding claims 26 & 50, Itoh also teaches wherein the printing device is configured to periodically broadcast (figs. 2-3) a signal to the computing device for the purpose of establishing the communication link (figs. 2-3).

Response to Arguments

Applicant's arguments filed 12/28/05 have been fully considered but they are not persuasive.

- Regarding claims 15, 17, 18, 20, 22-25, the applicants repeatedly argued the cited prior art of record fails to teach and/or suggest “transmission of computer device parameters to the printing device upon establishment of a communication between a computing device and a printing device”.

In response, the examiner fully disagrees with such assertions. First of all, suggested features are not cited in claims 15, 17, 18, 20, and 22-25, but rather “detecting the establishment of a communication between a computing device and the printing device wherein establishment of the link includes transmission of computing device parameters to the printing device” are cited. In response to the newly added features/limitations, the examiner herein has introduced 112, 1st and 2nd rejections. Please see above for more details. Secondly, none of the features as argued above are previously cited in claims 15, 17, 18, 20, and 22-25. Finally, Nakagiri explicitly discloses “transmission of computing device parameters (transmitting operating system identifier of host computer 3000 to

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printer 1500, fig. 4, col. 5, lines 15-45 and col. 8, lines 40-45 and col. 9, lines 24-28) to the printing device”.

- Regarding claims 15, 17, 18, 20, 22-25, and 27-29, 31-33 the applicants repeatedly argued the cited prior art of record fails to teach and/or suggest downloading print software stored in memory of the printing device “in response to establishment of a communication link” between a computing device and a printing device.

In response, the examiner fully disagrees with such assertions/arguments. Nakagiri discloses downloading print driver from printer’s memory to host computer after the communication link has been established (fig. 4, *col. 6, lines 42-46 and col. 7, lines 33-40*). Inherently, communication link between printer device and host computer must be established prior to transmit any data back and forth. None of the features/limitations as cited in claims 15, 17, 18, 20, and 22-25 indicates downloading print software immediate right after (i.e. as soon as) communication has been established. There is no time frame of when to download print software. “In response to establishment of a communication link” does not exclusively have to be immediate (i.e. as soon as) after the communication is established. However, Nakagiri expressly teaches the processes as shown in figs. 4, 6, and 7 are executed when their connection (communication link between printer and host device) is activated and/or updated (*col. 6, lines 42-46 and col. 7, lines 33-40*).

- Regarding claims 31-33, the applicants argued the cited prior art of record fails to teach and/or suggest “file system” as cited. The applicants also argued Nakagiri only describes user-directed download of a print driver from a peripheral to a host computer. In addition, the applicants argued Nakagiri does not teach a means to allow the computing device to select and download files from the file system.

- In response, Nakagiri explicitly teaches “file system” as shown in fig. 2, wherein plurality of print drivers stored in ROM 13 in hierarchy format. Nakagiri’s system is to download and install compatible printer driver automatically without human intervention (col. 2, lines 15-22, col. 7, lines 5-10, and col. 8, lines 8-30), which contradicts what applicants have argued. In response to a means to allow the computing device to select

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and download files from the file system, the examiner notes to the applicants that the argued features are not part of the original filed specification, please see above 112, 1st paragraph rejection for details. According to the original filed specification, the printer device determines the compatibility between computing device and print software stored and to select appropriate software to download to computing device; in other words, print software selection is performed by the printer device and not by the computing device. As for prior art rejection, the examiner herein interprets the selection is herein performed by the printer device. Finally, argued features/limitations were not cited in previous claim 31.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


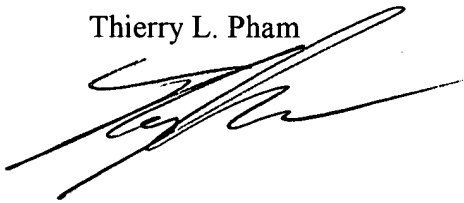
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham


GABRIEL GARCIA
PRIMARY EXAMINER